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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Ralf Widera

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EXAMINER

LIN, WEN TAI

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/507,228	<b>Applicant(s)</b> WIDERA ET AL.	
	<b>Examiner</b> Wen-Tai Lin	<b>Art Unit</b> 2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 25-55 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 25-55 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. Claims 25 – 55 are presented for examination.
2. The text of those sections of Title 35, USC code not included in this action can be found in the prior Office Action.

***Claim Rejections - 35 USC § 102***

3. Claims 25-52 and 55 are rejected under 35 U.S.C. 102(e) as being anticipated by Cruickshank et al. [U.S. PGPub 20030126256].
4. Cruickshank was cited in the previous office action.
5. As to claims 25 and 29, Cruickshank teaches the invention as claimed including: a method for automatically indicating status information via an output device, the status information including at least one of a status of a component of a measuring system, a status of a connection of the measuring system, and a measurement result of the measuring system [e.g., Abstract], the method comprising:

sending measurement packets with an adjustable distribution in time [i.e., collection of packets containing measured data are set to a desired, adjustable period] so as to determine first status information [e.g., paragraphs 30 and 47].

assigning first status information to a first status range of a plurality of fixed status ranges according to at least one first predetermined condition, the first status range being limited by at least one first threshold value [e.g., paragraphs 7-8];

outputting the assigned first status range [e.g., paragraph 139; Fig.3; Table 5]; and  
automatically updating the first status information at a predetermined time interval [paragraphs 132-139; 142-146], wherein the outputting is performed so as to enable an easy identification of the assigned first status range [Tables 1 and 5].

6. As to claim 26, Cruickshank teaches that the method further comprises:

assigning second status information to a second status range [e.g., the second metric] of the plurality of fixed status ranges according to at least one second predetermined condition, the second status range being limited by at least one second threshold value ;

outputting the assigned second status range [e.g., table 5]; and  
automatically updating the second status information at the predetermined time interval [paragraphs 32, 143].

7. As to claims 27 and 28, Cruickshank further teaches that the measuring system includes at least a portion of a telecommunications network, wherein that the telecommunications network includes at least one of an internet and an intranet [e.g., paragraph 24].

8. As to claims 30-31, Cruickshank further teaches that the outputting includes displaying the assigned first status range in a graphic using an output device [e.g., Figs. 3-6] and further comprising displaying the first status information in the graphic using the output device, wherein the graphic includes a matrix [e.g., Tables 1 and 5; note that a table has its elements/cells arranged as a matrix]

9. As to claims 32-34, Cruickshank further teaches that the graphic includes a graphical user interface, a first level of the first status range on the graphical user interface having at least one underlying representation level capable of being made visible by activation in the first level, wherein the graphical user interface includes a window [Figs. 3-6 and 8, each of which is a window], wherein at least one of the first status information and the first status range is displayed, relative to the first level, in increased detail in the at least one underlying representation level [note that Fig. 8 shows increased details of an element in Figs. 3-5].

10. As to claim 35, Cruickshank further teaches that each of the status ranges has a respective different color so as to individualize each respective status range [e.g. paragraph 144].

11. As to claim 36, Cruickshank further teaches that:  
the plurality of status ranges includes a second status range;  
the first and second status ranges reflect at least one of a magnitude of a first measurement result, a plurality of second measurement results, and a value describing a status of

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a first component of the measuring system [Fig.3; Table 5; note that in accordance with the passage at paragraph 30, the collected CMTS data such as CMTS traps, SNR and CMTS resets are by itself reflecting the status of the CMTS]; and

the first and second status ranges together form a hierarchy [e.g., paragraph 144].

12. As to claim 37, Cruickshank further teaches that the measuring system includes a first and a second measuring computer [e.g., 12-14, Fig.1] and a control computer [e.g., 20, Fig.1] configured to control the first and second measuring computer; and

the first status information is based on at least one of a status of the first measuring computer, a quality of a measurement connection between the first and second measuring computers, a reachability of at least one of the first and second measuring computers by the control computer, a time synchronization of the first and second measuring computers, and a currentness of the status information [e.g., paragraphs 30-31].

13. As to claim 38, Cruickshank further teaches that a first component of the measuring system includes a measuring computer; the first status information relates to a status of the measuring computer; and the displaying the first status information includes displaying the first status information in an assigned first field in a first column of the matrix [See Table 5].

14. As to claim 39, Cruickshank further teaches that the outputting includes displaying the assigned first status range in a matrix of a graphic using the output device, and further comprising:

displaying the first status information in an assigned first field in a first column of the matrix, the first status information being based on a status of the first measuring computer [e.g., first row of Table 5 represents a first modem performance metric associated with the first measuring computer];

displaying an assigned second status range in the matrix using the output device; and displaying second status information in an assigned second field in the first column of the matrix using the output device, the second status information being based on a status of the second measuring computer [e.g., second row of Table 5 represents a second modem performance metric associated with the second measuring computer].

15. As to claim 40, Cruickshank further teaches that the first and second measuring computers are represented in the assigned respective field in the first column of the matrix by a respective identifier including at least one of a name and an IP address [See the left column of Table 5, which are modem identifiers associated with their measuring computers.

16. As to claim 42, Cruickshank further teaches that a first component of the measuring system includes a measuring computer, and further comprising displaying the first status information in an assigned first field in a first column of a matrix of a graphic, the first status information being based on a status of the measuring computer, the first status information including at least one of a status of a time synchronization of the measuring computer, the reachability of the measuring computer by a control computer, and at least one error message of

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the measuring system regarding the measuring computer [e.g., Table 1, wherein error rates are incorporated into the calculation of the performance metrics].

17. As to claim 43, Cruickshank further teaches that a first component of the measuring system includes a measuring computer, and further comprising displaying the first status information in an assigned first field in a first column of a matrix of a graphic, the first status information being based on a status of the measuring computer, an assignment of the measuring computer to a control computer being indicated in a respective field in a first row of the matrix [e.g., Table 5, wherein the modem a identifier is displayed in a first row of the matrix].

18. As to claims 41 and 44 - 46, since the features of these claims can also be found in claims 25-40, they are rejected for the same reasons set forth in the rejection of claims 25-40 above.

19. As to claims 47-48, Cruickshank further teaches that the outputting includes displaying the assigned first status range in a matrix of a graphic using the output device and further comprising displaying the first status information in the graphic using the output device, the graphic including a graphical user interface, a first level of the first status range on the graphical user interface [e.g., Fig. 3] having a second representation level capable of being made visible by activation in the first level, a second field of the matrix being disposed in a second row or column and including the second representation level showing a status of a first measurement connection in more detail than the first level, wherein the second representation level indicates a



type of the first measurement connection between first and second measuring computers of the measuring system and a status of at least one measurement parameter determining a quality of the first measurement connection [paragraph 146; note that the lower portion 88 of Fig.3 is activated by selection of a relevant category in the upper portion 86, Fig.3].

20. As to claim 49, Cruickshank further teaches that the status of the at least one measurement parameter is based on at least one transmission characteristic in the first measurement connection [e.g., paragraph 13].

21. As to claim 50, Cruickshank further teaches that the at least one transmission characteristic includes at least one of a packet delay, an IP delay variation, and a packet loss [e.g., paragraphs 8 and 13; i.e., the network characteristics includes packet delay and loss].

22. As to claim 51, Cruickshank further teaches that the second representation level has a subordinate third representation level showing measurement results in detail over a predetermined period of time [e.g., 94, Fig. 3; Fig. 8].

23. As to claim 52, Cruickshank further teaches that the outputting includes displaying, using an output device, the assigned first status range in a matrix of a graphic including a graphical user interface, and further comprising displaying the first status information in the matrix using the output device, a first level of the first status range on the graphical user interface having a subordinate second representation level capable of being made visible by activation in

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the first level, the second representation level displaying system messages [e.g., 86, 88, Fig.3; paragraph 146].

24. As to claim 55, Cruickshank further teaches that the adjustable distribution in time comprises at least one of a constant or exponential distribution [e.g., paragraphs 30 and 47].

***Claim Rejections - 35 USC § 103(a)***

25. Claims 53-54 are rejected under 35 USC 103(a) as being unpatentable over Cruickshank et al.[U.S. PGPub 20030126256], further in view of Official Notice.

26. As to claim 53, Cruickshank teaches that the network monitoring is situated in an Intranet or Internet environments [e.g., paragraph 24]. Cruickshank is silent about the feature of using a browser to display and update the status information.

However, Official Notice is taken that Internet browser has been widely used to conduct various information presentations. It would have been obvious to one of ordinary skill in the art to use a browser, such as an Internet browser, to perform Cruickshank's display and update the status information because the Internet browser is free tool and it is already familiar to Internet users.

27. As to claim 54, Cruickshank further teaches time stamping the data packets that are obtained from all the measuring devices synchronously [e.g., paragraphs 33 and 82].

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Cruickshank does not specifically use the example of monitoring communication delay between two measuring nodes. Therefore Cruickshank is silent about time stamping a data packet at the transmitting node as well as at the receiving node.

However, Official Notice is taken that measuring communication delay by actually sending a data packet by time stamping at the transmitting and receiving nodes is well known in the art. It would have been obvious to one of an ordinary skill in the art to have included communication delay measurements and use the typical time-stamping method to measure the various delay between network nodes because: (1) communication delay is an essential part of network characteristics and (2) time-stamping a data packet for obtaining delay measurement between two stamping nodes is a efficient and feasible technique [For motivation see paragraph 13].

28. Applicant's arguments filed on 6/23/2008 for claims 25-55 have been fully considered but they are not deemed to be persuasive.

29. Specifically Applicant argues that the feature that (1) claim 25 recites sending measurement packets with an adjustable distribution in time. Cruickshank on the other hand teaches that raw data are collected at predetermined time intervals, which may be different depending on the nature of the raw data collected, instead of making the time interval adjustable for each particular category of raw data; and (2) Cruickshank merely describes collection of data, instead of using measurement packets to measure and calculate status information (see Applicant's specification at paragraphs 49-52).

30. As to point (1), Applicant is directed to Cruickshank reference at paragraph 30, wherein Cruickshank teaches that measured data are collected periodically according to predetermined desired time intervals. The phrase “desired time intervals” implies that the time intervals can be adjusted as desired and set as predetermined values. Note further that neither claim 25 requires that the time interval be adjustable for each particular category of raw data, nor does Cruickshank indicate that the adjustability only applies to different categories of raw data.

As to point (2): the term “measurement packets” has been interpreted as packets containing measurement data because it lacks the similar kind of context as shown in Applicant’s specification at paragraphs 49-51, wherein the text clearly engages one sending node, one receiving node and a selected measurement path, and it uses time stamp to calculate packet delay along the measurement path. On the other hand, paragraph 52 teaches the measurement packets in the context of retrieving the statuses of computers 28, 30 and 32. To certain extent, Cruickshank’s collection of raw data is also an act of retrieving the performance statuses of the underlying network elements such as syslog files, CMTS traps and resets, etc. (see paragraph 30).

Applicant is reminded that although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

For at least the foregoing reasons, it is submitted that the prior art of record reads on the claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wen-Tai Lin whose telephone number is (571)272-3969. The examiner can normally be reached on Monday-Friday(8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915. The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

(571) 273-8300 for official communications; and

(571) 273-3969 for status inquires draft communication.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Wen-Tai Lin

September 16, 2008

/Wen-Tai Lin/

Primary Examiner, Art Unit 2154